

PATENT

I Claim:

1 ~~Sub B2~~ A tire comprising:

2 (a) a carcass ply based on metal cords and an elastomeric carcass layer
3 coating said cords,

4 (b) an inner elastomeric layer which defines the radially inner face of
5 said tire, thereby circumscribing the inner space of the tire, and which protects the carcass
6 ply from diffusion of air coming from the inner space of the tire, and

7 (c) an intermediate reinforcement layer located between said carcass
8 ply and said inner layer, said intermediate layer being formed from a composition
9 comprising:

10 (i) an elastomer comprising:
11 a natural or synthetic polyisoprene having a majority of
12 chains with cis-1,4 bonds and a copolymer of one or more conjugated diene polymers and
13 one or more vinyl aromatic polymers, said copolymer simultaneously satisfying the
14 following relationships:

- 15 (1) $D \geq 60 - 1.75 \cdot VA$
16 (2) $D \leq 116 - 1.64 \cdot VA$
17 (3) $D > 10$
18 (4) $VA > 10$

PATENT

19 wherein D is the amount of diene chains having a 1, 2 bond
20 content (in %) and VA is the amount of vinyl aromatic chains (in %), and

21 (ii) carbon black, in an amount of 25 to 85 parts by weight per
22 hundred parts of said elastomer (phr),

23 wherein said carbon black has values of DBP oil absorption
24 (in ml/100 g) and of BET specific surface area (in m²/g) which fulfil the following
25 relationship:

26
$$DBP \leq -0.88 \cdot BET + 190.$$

1 The tire according to Claim 1, wherein the elastomer comprises

2 (a) polyisoprene having a greater than 80% cis-1,4 bond content and a
3 copolymer prepared in solution from conjugated diene and vinyl aromatic monomers,
4 wherein the conjugated diene monomers are selected from the group consisting of
5 butadiene, isoprene and mixtures thereof and the vinyl aromatic monomers are selected
6 from the group consisting of styrene, α -methylstyrene and mixtures thereof,

7 said copolymer satisfying the following relationships:

8 (i)
$$D \geq 66 - 1.58 \cdot VA$$

9 (ii)
$$D \leq 124 - 1.71 \cdot VA$$

10 (iii)
$$D > 10$$

11 (iv)
$$VA > 10,$$

PATENT

12 ^{sub}
 ^{a27} wherein D is the amount of diene chains having a 1, 2 content (in
13 %) and VA is the amount of vinyl aromatic chains (in%), and
14 (b) carbon black having values of DBP oil absorption (in ml/100 g)
15 and of BET specific surface area (in m²/g) that fulfil the following relationship:
16 $DBP \leq -0.88 \cdot BET + 185.$

1 (3.) The tire according to Claim 1 or 2, wherein the composition comprises a
2 white reinforcing filler in an amount of less than 50 phr, said filler comprising silica
3 and/or alumina, having surface SiOH and/or AlOH functions, respectively.

1 4. The tire according to Claim 3, wherein the white reinforcing filler has a
2 BET specific surface area of between 30 m²/g and 240 m²/g.

1 (5.) The tire according to Claim 1 or 2, wherein the composition comprises a
2 modified carbon black having surface SiOH and/or AlOH functions, in an amount of less
3 than 50 phr.

1 6. The tire according to Claim 1 or 2 wherein the composition comprises a
2 paraphenylene diamine antioxidant in an amount of 1 to 5 phr.

PATENT

1 7. The tire according to Claim 1 or 2 wherein the composition comprises a
2 metal salt selected from the group consisting of organic salts and hydroxides of cobalt,
3 nickel and iron, in an amount of 0.03 to 3 phr.

1 8. The tire according to Claim 1 or 2 wherein the composition comprises
2 stearic acid in an amount of less than 2 phr.

1 9. The tire according to Claim 1 or 2 wherein the composition comprises zinc
2 oxide in an amount of more than 2 phr.

1 10 The tire according to Claim 1 or 2 wherein the composition comprises
2 sulphur in an amount of 1 to 6 phr.

1 11. The tire according to Claim 1 or 2, wherein the intermediate elastomeric
2 reinforcement layer has a thickness of 1 to 4 mm.

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